

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)	
)	
Second Periodic Review of the)	MB Docket No. 03-15
Commission's Rules and Policies)	
Affecting the Conversion)	RM 9832
To Digital Television)	
)	
Public Interest Obligations of TV)	MM Docket No. 99-360
Broadcast Licensees)	
)	
Children's Television Obligations of)	MM Docket No. 00-167
Digital Television Broadcasters)	
)	
Standardized and Enhanced Disclosure)	MM Docket No. 00-168
Requirements for Television Broadcast)	
Licensee Public Interest Obligations)	

COMMENTS OF CAPITOL BROADCASTING COMPANY, INC.

Introduction

Capitol Broadcasting Company, Inc. ("CBC") hereby submits its comments in the above-captioned proceedings. CBC files these comments in its capacity as the licensee of local television stations WRAL-TV and WRAL-DT, Raleigh, North Carolina; WRAZ-TV and WRAZ-DT, Raleigh, North Carolina; WJZY-TV and WJZY-DT, Belmont, North Carolina; and WWWB-TV and WWWB-DT, Rock Hill, South Carolina. CBC is also the licensee of WILM-LPTV, Wilmington, North Carolina.¹

¹ WRAL-TV (CBS), WRAL-DT (CBS), WRAZ-TV (FOX), and WRAL-DT (FOX) serve the Raleigh-Durham (Fayetteville) Designated Market Area (DMA #29); WJZY-TV (UPN), WJZY-DT (UPN), WWWB-TV (WB), and WWWB-DT (WB) serve the Charlotte Designated Market Area (DMA #28); and WILM-LPTV serves the Wilmington Designated Market Area (DMA #144).

Having launched the nation's first digital television station, WRAL-DT,² in July 1996, CBC is filing these comments as an enthusiastic supporter of digital television ("DTV") and in direct response to a number of questions presented in the *Notice of Proposed Rulemaking* in the above-captioned proceeding ("*Notice*").³ In the interest of focusing these comments on the realities of the transition from the local station and viewer perspective, CBC will limit its comments to practical issues, leaving the specific legal arguments to the National Association of Broadcasters ("NAB") and the Association for Maximum Service Television, Inc. ("MSTV"). On matters where CBC differs from the NAB and MSTV, CBC will file reply comments.

Based upon our seven years of local digital experience, CBC respectfully urges the Federal Communications Commission ("the Commission") to adopt rules and regulations that accelerate the digital transition, while serving the public interest.

Background: The WRAL-DT and WRAZ-DT Business Plan Evolution

CBC is including this background section in response to a number of requests from the Commission staff to learn more about individual stations' digital business plans. This section also responds to the *Notice's* request for digital programming information.

From day one, CBC recognized the importance of high-definition programming ("HD") to the preservation of free over-the-air broadcasting, by providing viewers with a superior video and audio experience, by keeping local broadcast signals technologically competitive with cable's and satellite's digital signals, and by encouraging programmers

² WRAL-HD, operating under an experimental license at Channel 32, is the actual station that launched on July 23, 1996. WRAL-DT, Channel 53, replaced WRAL-HD on March 23, 2000. For consistency purposes, CBC will refer to WRAL-HD and WRAL-DT interchangeably throughout these comments.

³ *Notice of Proposed Rulemaking*, FCC 03-8, In the Matter of Second Periodic Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television (MB Docket No. 03-15 and RM 9832), and related proceedings (MM Docket Nos. 99-360, 00-167, & 00-168) (rel. Jan. 27, 2003).

to continue to offer broadcast television the rights to key national events, such as the Super Bowl. As a result and as a CBS local affiliate⁴, WRAL-DT's first commitment was *and is* to HD programming. WRAL-DT initially planned to dedicate its entire 19.4 Mbps to a single HD signal, but with the advancement of technology, WRAL-DT's strategy shifted to multicasting. Utilizing advanced compression technology and statistical multiplexing, WRAL-DT now offers its viewers an HD channel without material degradation (*averaging 14-16 Mbps*), a full-time local news channel in standard-definition (*averaging 2-4 Mbps*), and enhanced on-demand local content via a data stream (*1 Mbps*). In addition, WRAL-DT, in concert with its sister station WRAZ-DT, offers viewers in the Raleigh-Durham market a local weather channel.⁵ The WRAL-DT and WRAZ-DT business plans evolved in stages over the past seven years. Those stages include:

Stage One – Focus on Digital Technology (Mid-1996-1998)

During the first stage, the focus was technical. WRAL-HD transmitted the nation's *first* high-definition broadcast on July 23, 1996 – 34 days after receiving its experimental license for WRAL-HD. After that first transmission, WRAL-HD conducted numerous signal strength and quality tests, compiling volumes of data for its use and for the Commission's use. Based on this data and data from the Advanced Television Systems Committee (ATSC), MSTV, NAB and other broadcasters, CBC chose to support the 8VSB standard and continues to support that standard today. CBC also became an advocate of the 1080i HD resolution standard.

⁴ WRAL-DT congratulates CBS for its leadership in producing HD primetime and special event programming, which has been an important part of the transition to date.

⁵ WRAZ-DT is a local FOX affiliate. Since FOX adopted the 480p resolution standard with wide screen programming, compression and statistical multiplexing are unnecessary.

The next technical goal was to air a live HD satellite feed. With a borrowed HD production truck, WRAL-DT aired a live Atlantic Coast Conference football game in September 1997. That same week it also taped a local pops concert and a minor league baseball game in HD. Later in 1997, CBC founded HD Consortium, a cooperative allowing the exchange of HD programming among stations, now administered through the National Association of Television Programming Executives (“NAPTE”).

Then in October 1998, WRAL-DT aired the first live news event in HD – a 70-minute broadcast of John Glenn’s return to space. During this period, WRAL-DT also produced a number of other local HD programs, including several documentaries.

CBC began construction of its 1,989 foot digital TV tower in December 1998,⁶ now home to six television stations – WRAL-DT, WRAZ-DT, WNCN-DT (NBC), WNCN-TV (NBC), WLFL-DT (WB) and WRDC-DT (UPN). Consistent with the Commission’s urgings, five networks are co-located on CBC’s digital tower.

Stage Two – Network and Local HD Programming Ramps Up (1999-2000)

From 1999 to 2000, both CBS and WRAL-DT worked to create network and local HD programming to generate viewer interest and HD set sales. CBS’s commitment to HD allowed WRAL-DT to participate in a number of HD firsts – the airing of the first live HD National Football League (“NFL”) game, the first HD prime-time series, and the first HD news magazine. CBS began broadcasting HD primetime programming in September 1999, while WRAL-DT increased its volume of local HD programming. In December 1999, WRAL-DT unveiled a mobile HD production truck, which was used to produce the first live college basketball game in HD.

⁶ WRAL-DT began operating at full power on March 23, 2000, when the new tower became operational.

WRAL-DT gave new meaning to the term – March Madness – when it capitalized on the multicasting flexibility of its 19.4 Mbps. On March 16, 2000, during the CBS broadcast of the National Collegiate Athletic Association men’s basketball tournament, WRAL-DT multicast four games, allowing viewers to switch between any of the regional games airing at the same time. Since college basketball is an important part of the local Raleigh-Durham community, viewers embraced multicasting and CBC began to appreciate the flexibility it offered. In July and August 2000, WRAL-DT provided the first ever gavel-to-gavel coverage of the Republican and Democratic national political conventions in HD.

On October 13, 2000, WRAL-DT became the first TV station *in the world* to produce and air an all-HD newscast, including graphics, live shots, and news stories. The newscast was broadcast from the stage of the North Carolina State Fair.

***Stage Three – All-HD Newscast, WRAL NewsChannel,
and the WeatherCenter Debut (2001-2003)***

In 2001, WRAL-DT completed construction of its all-HD newsroom, allowing every WRAL-DT and WRAZ-DT newscast to be produced and aired in HD – resulting in over six hours of HD news each weekday. WRAL-DT also launched North Carolina’s first full-time news channel, WRAL NewsChannel using 2 - 4 Mbps of its digital over-the-air signal, giving viewers the opportunity to watch WRAL-DT’s news, weather and sports at their convenience in SD. WRAL NewsChannel also airs special live event coverage produced specifically for the NewsChannel, including North Carolina General Assembly hearings and committee meetings, coverage of local high-profile trials, and the media ownership hearing held at Duke University in March 2003, as well as locally produced public affairs programs. The NewsChannel enables WRAL-DT to provide

Raleigh-Durham with immediate additional information when breaking news occurs, such as the shuttle disaster. WRAL NewsChannel switched to NASA TV after network programming switched to sports. Designed to utilize low bit rates, the NewsChannel's video is flanked on the right with local news headlines and on the bottom with weather and stock information. In April 2003, CBC debuted WeatherCenter, a local weather channel on WRAZ-DT.

WRAL-DT and WRAZ-DT produced and aired a number of other non-news HD programs during 2002-2003, including ten Carolina Hurricanes National Hockey League games. WRAL-DT has also produced a number of children's programs in HD.

Enhanced on-demand content via a data stream is also an important part of WRAL-DT's and WRAZ-DT's business plan. DTVPlus, a division of CBC, in cooperation with WRAL-DT and WRAZ-DT, creates and streams enhanced local content to personal computers ("PC") equipped with digital media receivers, allowing PC users to view selected content on an individual basis instantly, including local election county-by-county results and WRAL-DT's local newscasts on-demand. CBC plans to expand its enhanced content delivery to TV sets once standards are adopted.

Summary

Balancing its commitment to HD and its commitment to local news, sports, weather and public affairs programming, CBC is pleased that through technology it can now offer 1080i HD programming, a full-time local SD news channel and enhanced content via a data stream on WRAL-DT, while extending Raleigh-Durham's local weather coverage through WRAZ-DT.

CBC has built its technical and programming digital infrastructure.

WRAL has been on the air since July 1996 – seven years.

CBC has produced hours of HD programming, including producing and airing all of WRAL-DT's and WRAZ-DT's newscasts in HD, numerous live sports events, documentaries, and other public affairs programming.

WRAL-DT's network, CBS, offers a full slate of primetime HD programming and many sports and special events in HD.

WRAZ-DT's network, FOX, offers several 480p wide screen programs, including National Football Leagues games and NASCAR auto races, which are very popular in the Raleigh-Durham market.

CBC works with local consumer electronics and independent retailers to market HD television displays .

Time-Warner Cable, Raleigh-Durham's primary cable system, carries the WRAL-DT, WRAL NewsChannel, WRAZ-DT and the WeatherCenter signals on its digital tier.

CBC estimates that approximately 12,500 TV households in the Raleigh-Durham market⁷ have television displays, set-top boxes equipped with HD tuners or HD cable set-top boxes. In addition, CBC estimates that Time-Warner has deployed approximately 150,000 SD set-top boxes. With the recent combination of local HD programming, primetime network programming, and cable carriage of five digital signals in the Raleigh-Durham market, CBC believes that the digital transition in Raleigh-Durham is ahead of other markets.

As an individual company, CBC is committed to returning its analog spectrum per statute and to creating HD and SD programming to drive the transition on a local level,

⁷ Raleigh-Durham (Fayetteville) is Nielsen Media Research's 29th Designated Market Area with 929,460 TV households.

but CBC recognizes the enormous cross-industry synergies required to reach 85% digital penetration. Therefore, CBC respectfully urges the Commission to adopt and enforce rules that mandate or encourage others in the broadcast, cable, satellite, and consumer electronics industries to cooperate in order to move the transition forward.

From the beginning and to date, the ownership and management of CBC have continually encouraged and supported the actions of the U.S. Congress and the Commission for conversion to digital technology. CBC is doing all it can to move the transition forward. CBC now believes the burden rests with the Commission to remove further impediments to the transition.

Impediments to the Transition

To reach 85% penetration and to return the analog spectrum, CBC believes that the Commission must adopt rules and regulations to remove the following obstacles that are impeding the digital transition:

Lack of Digital Carriage by Multichannel Providers – Although cable and satellite often wince when referred to as the gatekeeper, the reality is that over 85% of U.S. TV households receive their local TV channels from multichannel providers.⁸ According to recent numbers, only 107 to 120 of 809 digital stations were being carried on cable as of April 7, 2003.⁹ Those that are being carried, such as WRAL-DT and WRAZ-DT, are being carried on digital tiers, requiring consumers to pay an additional digital fee and to add a set-top box – not viewer-friendly actions. Direct Broadcast

⁸ See *Ninth Annual Report*, FCC 02-338, In the Matter of Annual Assessment of the Status of Competition in the Market for Delivery of Video Programming (MB Docket No. 02-145) (rel. Dec. 31, 2002).

⁹ CableWorld, “*Skirmish in the Desert Over DTV*,” Apr. 14, 2003. (In his opening remarks, NAB president Eddie Fritts said, “Here the cable industry is missing at its post and AWOL. . . At last count only 107 of 809 broadcast TV stations were receiving cable carriage.” . . . “That 107 figure is too low,” said Diane Burstein, the National Cable and Telecommunications Association’s deputy general counsel. “It’s closer to 120,” she said.) <http://www.cableworld.com/archive/cableworld/2203/04/14/cwd03041404.shtml>

Satellite (DBS) delivers signals to 18.38% of U.S. TV households,¹⁰ with EchoStar Communications Corporation (“the Dish Network”) offering CBS’ New York and Los Angeles digital feeds to viewers residing in markets, where CBS owns and operates the local CBS affiliate. To receive these HD signals, EchoStar subscribers in those markets must add a second dish.¹¹ DIRECTV, Inc. (“DirecTV”) does not carry any local broadcast digital signals. CBC respectfully urges the Commission to reconsider cable dual must carry – carriage of both the local analog and digital signals by upgraded cable systems¹² during the remainder of the transition period; to adopt must carry for cable and carry one/carry all for DBS effective at the end of transition; to extend must carry to all other existing and future multichannel providers; to require carriage of the entire 19.4 Mbps of programming¹³ without material degradation, including all HD and SD channels, program guides, data and the Program System and Information Protocol (“PSIP”) [discussed further in the next section]; and to require cable providers to offer local digital channels on its lower “basic” tier at no additional charge to the subscriber. CBC also encourages the Commission to explore rules and regulations that encourage DBS providers to cooperate with each other and with third-parties in the development of technologies to facilitate the carriage of all digital stations in all 210 TV markets.

¹⁰ DirecTV Press Release, Hughes Reports First Quarter 2003 Results (Apr. 14, 2003). http://www.hughes.com/ir/pr/03_04_14_earnings.asp (viewed Apr. 18, 2003); EchoStar Press Release, EchoStar Reports Fourth Quarter 2002 Results (Mar. 4, 2003). http://www.corporate-ir.net/ireye/ir_site.zhtml?ticker=dish&script=410&layout=-6&item_id=387901 (viewed Apr. 18, 2003).

¹¹ See <http://www.dishnetwork.com/content/products/hdtv/index.shtml> (viewed Apr. 18, 2003).

¹² Upgraded cable systems include those systems with 750 MHz.

¹³ Carriage of pay services within the 19.4 Mbps should not be mandated.

Lack of Digital Tuners – CBC commends the Commission on its so-called digital tuner mandate, which will hopefully gradually solve this problem, presuming it survives the current court challenge.¹⁴

Lack of Digital Copy Protection – Special event and high-quality digital programming is essential to drive the digital transition. With programmers threatening to withhold popular programming because of potential digital piracy, it is essential that the Commission¹⁵ or the U.S. Congress step in if the affected industries cannot reach an agreement by a date certain.

Lack of Interoperability – Many multichannel subscribers simply do not want to add the digital set-top box required to receive digital signals. CBC encourages the Commission to adopt consumer-friendly “plug and play” rules that allow consumers to plug their cable directly into their digital TV without the need for a set-top box. However, CBC agrees with NAB and MSTV: over-the-air reception capabilities should be included in all cable-ready sets. See joint comments filed by NAB and MSTV in the *Further Notice of Proposed Rulemaking*¹⁶ seeking comment on a Memorandum of Understanding (“MOU”) filed with the Commission by the cable and consumer electronics industries detailing an agreement on a cable compatibility standard for an integrated, one-way digital cable television receiver, as well as other unidirectional digital cable products.

¹⁴ *First DTV Periodic Review Second Report and Order and Second Memorandum Opinion and Order*, 17 FCC Rcd at 15978 (2002).

¹⁵ *Notice of Proposed Rule Making*, MB Docket 02-230, FCC 02-231 (rel. Aug. 9, 2002).

¹⁶ *Commercial Availability of Navigation Devices and Compatibility Between Cable Systems and Consumer Electronics Equipment*, *Further Notice of Proposed Rulemaking*, CS Docket No. 97-80 and PP Docket No. 00-67, FCC 03-3 (rel. Jan. 10, 2003).

More HD Programming Needed – CBC believes HD programming is the key driver in selling HD sets. When CBC broadcast ten Carolina Hurricanes hockey games in HD, HD TV display sales spiked and subscribers to HD cable set-top boxes doubled. Therefore, CBC supports requiring broadcasters to carry a certain percentage of their digital programming in 720p or 1080i high-definition.

Responses to Specific Questions

Channel Election – CBC agrees with the Commission that May 1, 2005 is a reasonable time for in-core channel elections, but clear procedures and priorities need to be established, so that out-of-core stations, such as WRAL-DT, can then make an election. However, CBC opposes the Commission's proposal to allow channel swaps during the transition without a rulemaking due to potential interference issues.

In addition, CBC is particularly concerned about channel elections for out-of-core stations, such as WRAL-DT, Channel 53. WRAL-TV's analog channel is VHF 5. At this point, WRAL-DT does not have sufficient operational data to determine whether a move back to Channel 5 is preferred over a move to an available in-core UHF channel. An MSTV study conducted in Cleveland suggests that the planning factors used by the Commission to predict the low-band VHF service are inadequate and that additional power may be needed to maintain adequate service levels.¹⁷ CBC recommends that the Commission, or the Commission through MSTV, conduct a comprehensive study of this issue, so that WRAL-DT and similarly situated stations may make informed channel election decisions. CBC urges the Commission not to make a unilateral decision, without

¹⁷ VSB/COFDM Project, 8VS/COFDM Comparison Project, 59 (Dec. 2000).

station input, when exercising its reservation of the right to select the final channel of operation for all stations.¹⁸

Replication and Maximization – CBC recommends that the end of the transition be the date to complete replication and maximization for in-core channels. For out-of-core channels, CBC recommends protection of replicated or maximized service areas and opposes earlier replication and maximization deadlines than for in-core channels. CBC does not believe an intermediate signal coverage requirement for in-core or out-of-core channels is practical or economic.

Simulcasting – CBC does not believe the simulcasting requirements are necessary and believes that they may slow down the transition by discouraging local stations to air HD programming. Therefore, CBC supports either repealing the simulcasting requirements or decreasing the mandated percentages and extending the time periods as follows: 50% by April 1, 2004, 75% by April 1, 2005, and 100% by April 1, 2006.

End of Transition Issues – CBC supports a modified DMA market definition. As long as local digital signals are carried on a separate multichannel provider digital tier (whether basic or higher), only those consumers actually subscribing to the digital tier should be counted toward the 85% test. The Commission should bear the burden of verifying when the 85% test has been reached on a market-by-market basis.

Public Interest Obligations – Per the *Notice*, CBC updates its January 2001 comments in the Standardized and Enhanced Disclosure Requirements for Television Broadcast Licensee Public Interest Obligations, MM Docket No. 00-168, proceeding.

¹⁸ *Notice* ¶ 27 (“As we stated in the *First DTV Periodic Review Report and Order*, in all cases, including stations with both channels in-core, we reserve the right to select the final channel of operation in order to minimize interference and maximize the efficiency of broadcast allotments in the public interest.”)

CBC encourages the Commission to adopt public interest obligations as outlined in the appendix to the Gore Commission Report prepared by the President's Advisory Committee on Public Interest Obligations of Digital Television Broadcasters and to impose those obligations on each multicast channel.

ATSC Standards – CBC supports the Commission's proposal to change its rules to reflect any revisions to the ATSC DTV standard A/53B since the August 7, 2001 version.

PSIP – PSIP is essential to facilitating the viewer's ease of use and to capitalizing on the flexibility afforded by multicasting. CBC supports the ATSC A/65A PSIP standard and urges the Commission to adopt it into the rules. CBC also encourages the Commission to make PSIP mandatory for all broadcasters.

DTV Station Identification – CBC supports the use of single call letters and channels during the transition.

DTV Labeling Requirements – Although CBC has no specific labeling suggestions, CBC supports clear labeling requirements to avoid consumer confusion and disruption.

Conclusion

CBC urges the Commission to quickly adopt rules and regulations in all of the above-captioned proceedings. Finally, CBC requests that the Commission consider compensation for out-of-core stations for the move in-core or that the Commission back legislation to do the same.

Respectfully submitted,

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Dated: April 21, 2003